Statistics Learning Targets:

These may change as the year progresses, especially for projects.

Unit: The basics of Statistics

S1. Analyze articles from newspapers and magazines.

S2. Identify, create, and interpret categorical displays

S3. Identify, create, and interpret quantitative displays

S4. Describe the shape of data and appropriate summary statistics

S5. Solve problems using the Standard Bell Curve

Unit: Sampling, Experiments, and Studies

S6. Name different sampling methods and bias or sampling variability that could result

S7. Describe the difference between a population and sample AND the notation

S8. Describe the difference between an observational study and experiment

Unit: Use regression to find trends

S9. Describe how equations/ideas related to correlation are derived

S10. Evaluate a scatterplot and describe correlation

S11. Describe how to find the line of best fit, apply it, and interpret it

Unit: Probability

S12. Solve probability questions using the addition and multiplication rules

S13. Solve probability questions using conditional probabilities

S14. Solve problems using combinatorics

Unit: Probability Models

S15. Find expected value and standard deviation

S16. Evaluate geometric and binomial models

S17. Set up and evaluate problems that use the Central Limit Theorem.

Unit: Confidence Intervals and Hypothesis Testing

S18. Use and identify proper notation

S19. Set up and evaluate confidence intervals and margin of error.

S20. Identify and write Type I and Type II errors

S21. Set up and evaluate hypothesis testing using proportions and large means

S22. Identify and use technology to solve small mean, two proportion, two means, and chi-square hypothesis testing

S23. Identify key text in readings

S24. Conduct a statistical study with proper techniques

S25. Report findings form a statistical study